## 2014 Regional Snapshot

## Is water-use efficiency improving in our agricultural areas?

Water-use efficiency measures the proportion of rain that is used by rain-fed crops. It measures the efficiency of agricultural productivity, which is also influenced by soil type and condition, and land management systems.

Water-use efficiency of our irrigation industries is covered in a separate report.

The main crops grown in South East NRM region are wheat and barley. Higher water-use efficiency means that grain yields are higher for a given amount of rain, and that the amounts of run-off, evaporation and drainage to water tables are lower.

Land managers can increase water-use efficiency by sowing crops earlier in the season, controlling weeds, retaining stubble and by reducing soil disturbance and compaction by machinery. Planting the most suitable varieties of crops, improving plant nutrition and controlling animal pests and diseases also improve water-use efficiency.





State target

Improve soil and land condition

Trend (2005-09)

Stable

Ongoing efforts will be needed to increase the water-use efficiency of our soils

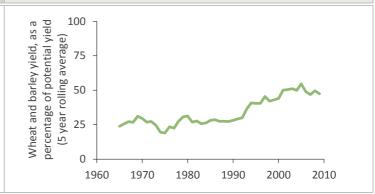
Stable
Getting worse

Unknown

Not applicable

For the wheat and barley crops in the South East NRM region, water-use efficiency improved from 24 per cent to 47 per cent between 1965 and 2009, and was stable from 2005 to 2009 (map above and graph on right).

These improvements in water-use efficiency are due to adoption of improved farming practices and not an increase in rain, which was stable over those periods (graph below).



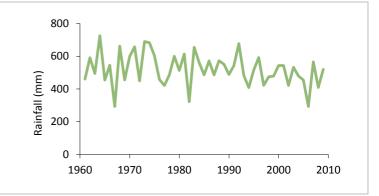
Where we are at (2009)

Fair

The amount of wheat and barley produced was 47 per cent of the potential yield

Land managers can further improve water-use efficiency.

Optimising the use of rain will help to maintain the long term productivity of cropping industries.



**Reliability of information** 



Fair

Further information:

Technical information for this report

Soil and land condition monitoring in South Australia